

REMARKS

Claims 1 and 5-7 remain pending in this application, with claim 1 being in independent form. Claims 1, 5, and 7 have been amended to define still more clearly what Applicants regard as his her their invention. Claims 2-4 have been canceled without prejudice or disclaimer of subject matter.

The Information Disclosure Statement filed on June 26, 2006

As an initial matter, the Examiner states at paragraph 3 of the Office Action that two foreign references submitted with Information Disclosure Statement (IDS) filed on June 26, 2006 were not considered because a concise explanation of relevance in the English language was not provided. These two foreign references are JPA 4-64164 and JPA 10-335193.

However, with the IDS of June 26, 2006 Applicants drew the Examiner's attention to corresponding U.S. Patents 5,544,348 and 6,516,237. This satisfied the requirement for a concise explanation of relevance in the English language of the two foreign references pursuant to MPEP 609. Nevertheless, submitted herewith are copies of the English-language abstracts of those two foreign references, as requested by the Examiner. The Examiner's attention is also directed to page 1 of the present specification for a further discussion of these two foreign references. For all the foregoing reasons, Applicants respectfully request the Examiner to acknowledge that these two references have been considered.

The Objection to the Specification

At paragraph 4 of the Office Action, the Examiner requires a substitute specification to correct grammatical errors such as those noted by the Examiner. Accordingly, submitted herewith is a substitute specification (both clean and marked-up versions) which corrects those and other errors as required by the Examiner. It is submitted that no new matter has been added.

It is noted in particular that Applicants were unable to find the language quoted by the Examiner as relating to paragraph [0037]. Applicant did find similar language in paragraph [0020] and amended paragraph [0020].

Accordingly, withdrawal of the objection to the specification is respectfully requested.

The Rejection under 35 U.S.C. § 101

Claims 1-6 were rejected under 35 U.S.C. § 101, as being directed to nonstatutory subject matter.

With respect to the Examiner's comments at paragraph 5.1 of the Office Action relating to claim 1, the Examiner takes issue with claim 1 being directed to a system comprising "element arrangement data reading means," "element definition file reading means," "program array preparing means," and "program execution means." In particular, the Examiner states that these means are considered to be software modules, and that software *per se* is non-statutory subject matter per MPEP 2106.01.

Claim 1 has been amended to recite that the system includes a processor and a memory coupled to the processor, such that the process simulation system is configured to cause the processor to execute a process simulation according to the units (e.g., the element

arrangement data reading unit) recited in claim 1. It is believed that the amendments to claim 1 overcomes the Examiner's rejection of that claim.

With respect to the Examiner's comments at paragraph 5.2 of the Office Action, the Examiner states that claims 1-6 are rejected because all process claims must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as article or materials) to a different state or thing. Apparently, the Examiner treats system claim 1 as a process.

The "machine-or-transformation" test with regard to claimed processes was set out in *In Re Bilski* as follows:

A claimed process is surely patent-eligible under § 101 if:
(1) it is tied to a particular machine or apparatus, or
(2) it transforms a particular article into a different state or thing.

Applicants submit that even if claim 1 is treated as a process, claim 1 now recites that the system includes a processor and a memory coupled to the processor, such that the process simulation system is configured to cause the processor to execute a process simulation according to the units (e.g., the element arrangement data reading unit) recited in claim 1. Accordingly, claim 1 is seen to satisfy at least prong (1) of the *Bilski* test set forth above.

For at least the foregoing reasons, withdrawal of the rejection under Section 101 is respectfully requested.

The Rejection under 35 U.S.C. § 112

Claims 1-7 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The claims have been carefully reviewed and amended as deemed necessary to ensure that they conform fully to the requirements of Section 112, second paragraph, with special

attention to the points raised in paragraph 6 of the Office Action. Applicants also have the following specific comments.

With respect to pages 5-6 of the Office Action, claims 1 and 5 have been amended to recite “units” instead of “means.”

With respect to paragraph 6.1 of the Office Action, claim 7 has been amended to recite a computer readable recording medium storing a program which, when executed, causes a computer to function as the process simulation system defined in claim 1.

With respect to paragraph 6.2 of the Office Action, cancellation of claim 2 renders its rejection moot. Nevertheless, the phrase “for example” no longer appears in any claim.

For at least the foregoing reasons, it is believed that the rejection under Section 112, second paragraph, has been obviated, and its withdrawal is therefore respectfully requested.

The Prior Art Rejections

Claims 1-4 and 7 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 4,967,386 to Maeda in view of U.S. Patent 6,970,816 to Bryan.

Applicants submit that independent claim 1, together with the claims dependent therefrom, are patentably distinct from the cited references for at least the following reasons.

Claim 1 is directed to a process simulation system including a processor and a memory coupled to the processor, the process simulation system being configured to cause the processor to execute a process simulation by simulating operations of various component elements constituting a production system so as to determine a process organization of the production system. Claim 1 recites, *inter alia*, “wherein a variable name replacing data for replacing a variable name described in the variable description of each of the element

definition files to a different variable name is described in the element arrangement data, and the process simulation system further comprising a variable name replacing unit configured to replace a variable name for which the variable name replacing data is set in the element arrangement data to an other variable name described in the variable name replacing data.”

Applicants note for the Examiner’s convenience that claim 1 as amended incorporates the recitations of now-canceled claims 2-4. By virtue of the features of claim 1, the system of claim 1 can achieve the advantageous effects described in the present specification at, e.g., paragraphs 0013-0015 and 0046.¹ For example, paragraph 0015 states:

Further, when variable names described in the element definition files are replaced by different variable names based on variable name replacing data described in the element arrangement data in this invention, for example, by replacing reference variable names of external reference variables described in the element arrangement data with concrete names described in the element arrangement data, it becomes possible to designate various referencing variables using one element definition file. Further, when same kind of plural processing units are arranged in the same process, different processing units can be distinguished using one element definition file by replacing general variable names showing processing units with different variable names distinguishing processing units.

Applicants submit that the proposed combination of Maeda and Bryan, even assuming such combination would be permissible, would not teach or suggest the features of amended claim 1.

Maeda, as understood by Applicants, relates to a simulation method for a modifiable simulation model. The simulation method includes a step of modifying a model in a simulation process, a step of detecting elements influenced by the model modification, and a step of performing a resimulation process while returning to the earliest one of the influenced

¹It is of course to be understood that the references to various portions of the present application are by way of illustration and example only, and that the claims are not limited by the details shown in the portions referred to.

elements.

Bryan, as understood by Applicants, relates to a method and system for efficiently generating parameterized bus transactions for verification of a design-under-test (DUT).

The Examiner, at page 14 of the Office Action, concedes that Maeda does not disclose “a variable name replacing data for replacing a variable name described in the variable description of each of the element definition files to a different variable name is described in the element arrangement data, and the process simulation system further comprising a variable name replacing unit configured to replace a variable name for which the variable name replacing data is set in the element arrangement data to an other variable name described in the variable name replacing data,” as now recited in claim 1.

However, the Examiner states that “Maeda et al. does teach using variables,” and the Examiner then cites Bryan as allegedly teaching what is missing from Maeda.

Applicants do not agree that Maeda in view of Bryan would teach or suggest the above-noted features of claim 1. In the portion of Bryan cited by the Examiner (column 2, lines 42-44), Bryan merely states:

The inclusion of rules as described allows the configuration file and resultant test case to be easily customized to a specific DUT.

Thus, the “rules” of Bryan apparently allow “customization” of the configuration file and the resultant test case to a specific DUT. The Examiner states that “customization infers the use of an editor,” but nothing here would teach or suggest at least “a variable name replacing data for replacing a variable name described in the variable description of each of the element definition files to a different variable name is described in the element arrangement data,” as recited in amended claim 1. See, for example, Fig. 4 of the present application, which shows an example of an element definition file including general external reference variables in 4c,

that are replaced with the variable name replacing data of Fig. 2, which shows an example of element arrangement data. The cited references are silent about any constitutions that can produce the advantageous effects described above. The Examiner's assertion that Maeda and Bryan would teach the above-noted features of claim 1 does not constitute a rational underpinning that would support the legal conclusion of obviousness:

... [R]ejections on obviousness cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. MPEP 2141.III, quoting *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385, 1396 (2007).

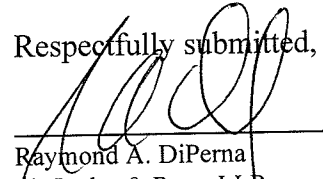
The Examiner also does not clearly articulate why the claimed invention would have been obvious. However, MPEP 2142 provides, with respect to establishing a prima facie case of obviousness, that "[t]he key to supporting any rejection under rejection under 35 U.S.C. 103 is the clear articulation of the reason why the claimed invention would have been obvious."

For at least the foregoing reasons, claim 1 is seen to be clearly allowable over Maeda and Bryan, whether considered separately or in any permissible combination (if any).

The other claims in this application are each dependent from claim 1 discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Respectfully submitted,



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